Reverse Engineering Locks

stories of some of the greatest (and simplest) attacks against high-security locks

by Deviant Ollam

Event Name

XXXX-XX-XX
Who am i?
Who am I?
Who am I?

THE CORE GROUP

- auditing
- assessments
- research
- trainings
Who am i?

- auditing
- assessments
- research
- trainings

- workshops
- public lectures
- lockpick village
- contests & games
Pin Tumbler Locks
Pin Tumbler Locks
Pin Tumbler Locks
The View From Outside
What’s On The Inside
It’s Not Just a Single Pin Stack
It’s Not Just a Single Pin Stack
The Key Has To Be Just Right
The Key Has To Be Just Right
In An Ideal World...
In The Real World...

photo by Scorche
In The Real World...
In The Real World...
Setting a Pin
So How Do Some Manufacturers Attempt To Make Locks Better?
Mul-T-Lock
Mul-T-Lock
Mul-T-Lock
Mul-T-Lock
Mul-T-Lock

photo by Matt Blaze
Mul-T-Lock

photo by Matt Blaze
Mul-T-Lock
Mul-T-Lock
Side Bars

- A Sargent ASSA V-10 key.
- A cutaway diagram of a lock mechanism, showing the internal components.
Side Bars
Schlage Primus

[Image of Schlage Primus components]
Medeco
Medeco
Medeco plug exposed, key pins rotating to align sidebar cuts

Top View  Side View
Medeco

Open in Thirty Seconds:
Cracking One of the Most Secure Locks in America

Marc Weber Tobias
Tobias Bluzmanis
Medeco

OPEN IN THIRTY SECONDS:
Cracking One of the Most Secure Locks in America

Marc Weber Tobias
Tobias Bluzmanis
Medeco

Successful Medeco Attacks

Marc Tobias
LockCon

OPEN IN THIRTY SECONDS:
Cracking One of the Most Secure Locks in America

Marc Weber Tobias
Tobias Bluzmanis
Kwikset Smart Series

Kwikset Smart Key

RE-KEY KIT

SmartKey... replace the key not the lock

http://deviating.net/lockpicking
Kwikset Smart Series

Kwikset Smart Key

Smart Key... replace the key not the lock

Smart Key, reemplaza la llave, no la cerradura

4 Everyday keys
2 Alternate keys

Kit para reprogramar

The Beauty of Strength.
Kwikset Smart Series

Smart Key
Customized Security.

RE-KEY KIT
KIT PARA REPROGRAMAR

4
Everyday keys
4 abre-llaves de uso diario

2
Alternate keys
2 abre-llaves de uso alternativo

SmartKey... replace the key not the lock
SmartKey... remplace la llave, no la cerradura

Kwikset
The Beauty of Strength.

http://deviating.net/lockpicking
Kwikset Smart Series

Kwikset Smart Key

SmartKey... replace the key not the lock

RE-KEY KIT
KIT PARA REPROGRAMAR

4 Everyday keys
2 Alternate keys
2 Dead bolts

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http://deviating.net/lockpicking
Kwikset Smart Series

Kwikset SmartKey... replace the key not the lock

SmartLock: reemplace la llave, no la cerradura
Kwikset Smart Series

Kwikset Smart Key

Smart Key... replace the key not the lock

4 Everyday keys
2 Alternate keys

2 New keys

Kwikset

RE-KEY KIT

Kit para reprogramar

The Beauty of Strength.

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Kwikset Smart Series

research and photo by Shane Lawson
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There’s also this little problem...

✿ Kwikset Smasher Tool
The Main Concept: Divide & Conquer...

Isolate Discrete Components
No Known Attack or Bypass
Thank you very much.